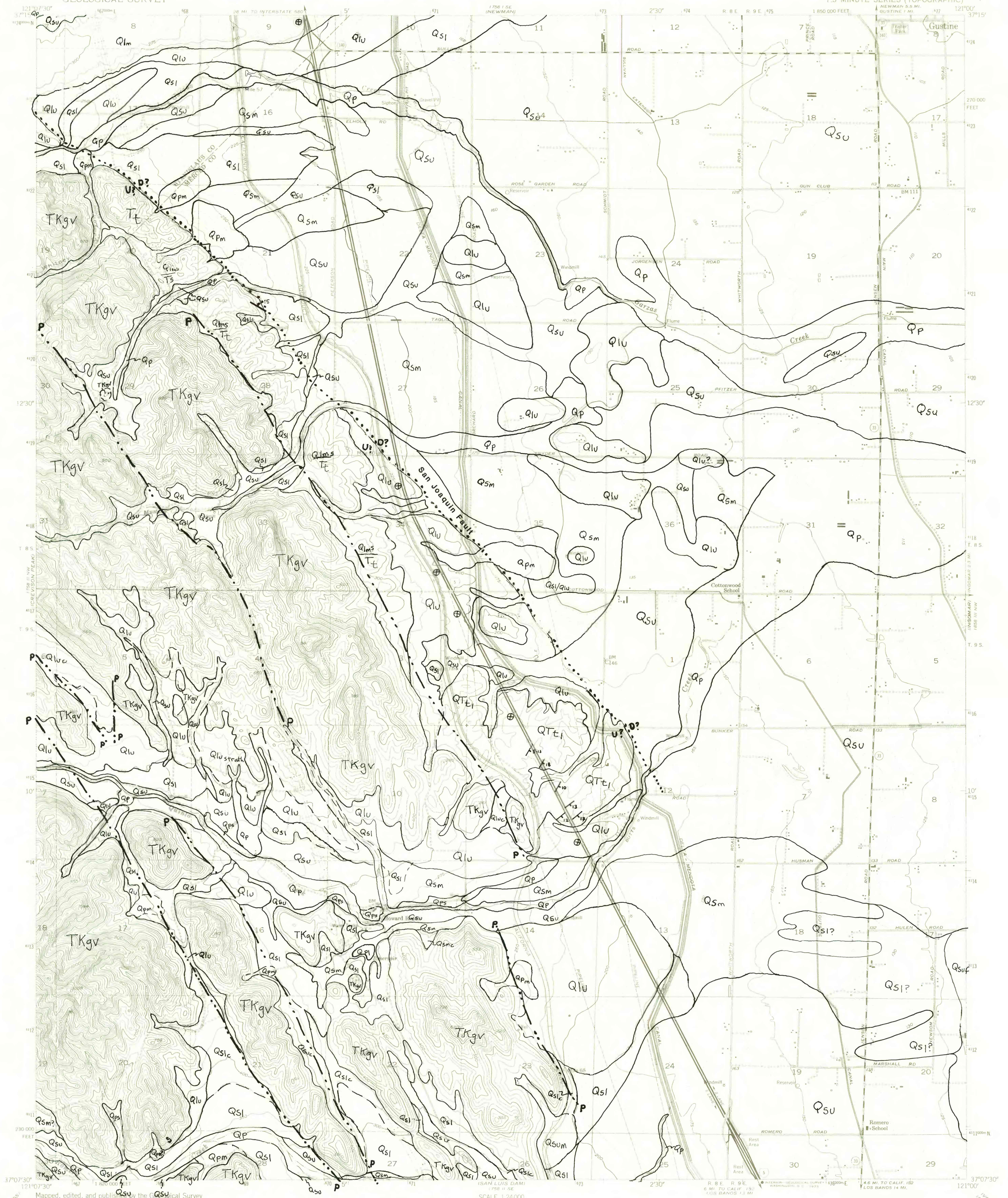


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

HOWARD RANCH QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NEWMAN 5.5 MI.
GUSTINE 1 MI.



Mapped, edited, and published by the Geological Survey
Control by USGS
Topography by plane-table surveys. Mapped 1916
Culture and drainage revised from aerial photographs taken 1949
Field check 1953
Polyconic projection. 1927 North American datum
10,000-foot grid based on California coordinate system, zone 3
Dashed land lines indicate approximate locations.

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24,000

CONTOUR INTERVAL 25 FEET
DOTTED LINES REPRESENT 5 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION
Heavy-duty ——— Light-duty ———
Medium-duty ——— Unimproved dirt ———
U.S. Route ——— State Route ———
Interstate Route ———

HOWARD RANCH, CALIF.
N 37°07'5" - W 121°00'7" S

1953
PHOTOREVISED 1971
AMS 1758 II NE-SERIES V695

GEOLOGIC MAP OF LATE CENOZOIC DEPOSITS OF THE WEST-CENTRAL SAN JOAQUIN VALLEY, CALIFORNIA

by
W. R. Lettis 1982

This map is preliminary and has
not been reviewed for conformity
with U.S. Geological Survey editorial
standards and stratigraphic nomenclature.